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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/415,957	10/08/1999	SHLOMO KIPNIS	U013174-6	5512

7590 06/17/2004
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EXAMINER

DINH, MINH

ART UNIT	PAPER NUMBER
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2132

14

DATE MAILED: 06/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/415,957

Applicant(s)

KIPNIS ET AL.

Examiner

Minh Dinh

Art Unit

2132

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-19, 33 and 35-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-19, 33 and 35-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This action is in response to the amendment filed 03/24/2004, in which claims 1, 33 and 38 were amended; claims 4 and 34 were cancelled; and claims 42-43 were added.

Response to Arguments

2. Applicant's arguments, see page 9, third paragraph, filed 3/24/04, with respect to claims 1, 33 and 38 have been fully considered and are persuasive. The rejections of claims 1, 33 and 38 under 35 USC 112 have been withdrawn.

Applicant's arguments, see page 11, third paragraph, with respect to the rejection of claim 4 under 35 USC 103 have been fully considered and are persuasive.

Therefore, the rejection has been withdrawn. However, a discovery of new prior art has necessitated new grounds of rejection. The delay in citation of the newly discovered prior art is regretted.

3. Applicant's arguments, filed 3/24/04, with respect to the rejection(s) of claims 11, 13-14, 17-18, 35, 37, 39 and 41 have been fully considered but they are not persuasive. In response to applicant's argument that there are no suggestions to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention

where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

With respect to claims 11, 35 and 39, applicant argues that the Murphy reference does not teach the motivation for combining the references. The Murphy reference and Digiorio reference are analogous art because they are from the same field of endeavor, which is accessing network resources using smart cards. Murphy teaches using a database to store and retrieve authentication information and provides the motivation for doing so (col. 6, lines 39-41).

With respect to claims 18, 37 and 41, Murphy teaches that a remote administrator being separated into a plurality of modules and various implementations of a module (col. 5, lines 39-49). In this case, flexible implementation of the remote administrator serves as the motivation.

With respect to claims 13-14, applicant points out that the reference does not include several elements cited in the claim. The examiner notices that the limitation of the claim is "at least one of the following" (2nd line of the claim). Applicant argues that there is no motivation for combining the references. Within the same field of endeavor, Muftic discloses a method of obtaining access to computer or network resources using a smart card (col. 5, lines 22-24). Muftic teaches the step of performing an administration operation by transmitting a certificate and credentials, which is part of an

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authentication protocol for controlling access to protected resources, and it serves as motivation.

With respect to claim 17, in response to applicant's argument that there is no recitation of a message being sent to an end user and there is no suggestion to combine the references. The Pare reference is analogous art because it is from similar problem solving area, which is performing authentication and authorization over a network. Pare discloses a status of success or failure being returned by the other computer system (col. 6, lines 45-47), which is a message being sent to an end user. The step of providing results of operations to end user itself serves as motivation

Claim Objections

4. Claims 7-8 are objected to because they depend on a cancelled claim, claim 4. It is assumed that claim 7 depends on claim 1 and claim 8 depends on claim 7; the claims are examined based on this assumption.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. Claims 1-3, 5-10, 12, 15-16, 19, 33, 36, 38, 40 and 42-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over DiGiorgio et al. (6,385,729) in view of Tolopka et al. (6,044,349) and Aboba et al. (RFC 2194, Review of Roaming Implementations).

a. Regarding claims 1, which is representative of claims 33 and 38, DiGiorgio discloses a method for remote administration of a smart card via communication network comprising the steps of:

associating a smart card with a remote administrator by storing administrator identification of the remote administrator in the smart card (col. 10, lines 58-60);

inserting a smart card in a user unit (col. 9, lines 49-50);

establishing communication between the smart card and a remote administrator via a communication network (col. 10, lines 25-26).

DiGiorgio does not disclose the step of employing the administrator identification information stored in the smart card to identify and establish communication with the remote administrator. Tolopka discloses the step of employing the administrator identification information stored in the smart card to identify and establish communication with the remote administrator (col. 5, lines 9-11; col. 6, lines 21-24). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of DiGiorgio such that identification information of a remote administrator is used to identify and establish communication with the remote administrator, as taught by Tolopka. That way the user unit can be dynamically configured to establish communication with different remote administrators.

DiGiorgio does not disclose that the establishing step comprises identifying a local administrator and determining the local administrator as a proxy administrator for administrating the smart card by transmitting at least authorization information from the remote administrator to the local administrator. Aboba teaches the use of local administrators and the steps of identifying a local administrator and determining the local administrator as a proxy administrator by transmitting at least authorization information from a remote administrator to the local administrator (see Section 4.6 Authentication, "After the initial PPP authentication ... and the user will be dropped by the NAS."). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of DiGiorgio to use local administrators and the establishing step comprising identifying a local administrator and determining the local administrator as a proxy administrator by transmitting at least authorization information from the remote administrator to the local administrator, as taught by Aboba, in order to provide roaming capability (see Abstract).

- b. Regarding claim 2, DiGiorgio further discloses that communication with the remote administrator is performed by the user unit (col. 5, lines 50-51; col. 10, lines 25-26).
- c. Regarding claim 3, DiGiorgio further discloses communication with the remote administrator employing the Internet Protocol (col. 5, lines 52-53).
- d. Regarding claim 5, DiGiorgio further discloses the step of administrating the smart card after communication with the remote administrator is established (col. 10, lines 29-30).

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- e. Regarding claim 6, DiGiorgio further discloses the step of administering the smart card immediately after communication with the remote administrator is established (col. 10, lines 29-30).
- f. Regarding claim 7, DiGiorgio and Tolopka disclose the step of administering the smart card after communication with the remote administrator is established (col. 10, lines 29-30). DiGiorgio and Tolopka do not teach the use of a proxy administrator. Aboba teaches the use of a proxy administrator (see Section 4.6 Authentication, "If the authentication request comes from ... and the user will be dropped by the NAS."). Please refer to motivation recited for using a proxy administrator as taught by Aboba in claim 1.
- g. Regarding claim 8, DiGiorgio and Tolopka disclose the step of administering the smart card immediately after communication with the remote administrator is established (col. 10, lines 29-30). DiGiorgio and Tolopka do not teach the use of a proxy administrator. Aboba teaches the use of a proxy administrator (see Section 4.6 Authentication, "If the authentication request comes from ... and the user will be dropped by the NAS."). Please refer to motivation recited for using a proxy administrator as taught by Aboba in claim 1.
- h. Regarding claim 9, DiGiorgio further discloses the step of performing an administration initialization procedure to authenticate the smart card (col. 10, lines 30-47).

- i. Regarding claim 10, DiGiorgio further discloses the step of preventing performance of any operation other than the administration initialization procedure until the procedure is verified to be in order (col. 10, lines 47-50).
 - j. Regarding claims 12 and 40, DiGiorgio further discloses the step of accessing a protected information resource (col. 10, lines 47-48).
 - k. Regarding claims 15 and 16, DiGiorgio further discloses the step of performing security mechanisms, bilateral authentication, for accessing the protected information resource by the smart card (col. 10, lines 28-48).
 - l. Regarding claim 19, DiGiorgio further discloses that the communication network comprises a MAN or a WAN (col. 5, lines 53-55).
 - m. Regarding claim 36, DiGiorgio further discloses protected information resource accessible by the smart card via the remote administrator (col. 10, lines 24-25).
 - n. Regarding claim 42, DiGiorgio further discloses that the administration initialization procedure comprises a two-way challenge-response authentication using information related to a shared secret (col. 10, lines 28-36).
 - o. Regarding claim 43, DiGiorgio further discloses that the bilateral authentication comprises a two-way challenge-response authentication using information related to a shared secret (col. 10, lines 28-36).
7. Claims 11, 18, 35, 37, 39 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over DiGiorgio in view of Tolopka and Aboba as applied to claims 1, 33 and 38 above, and further in view of Murphy et al. (6,266,744).

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a. Regarding claims 11, 35 and 39, DiGiorgio, Tolopka and Aboba do not disclose a smart card database at the remote administrator and the step of identifying the smart card in the smart card database. Murphy discloses a smart card database at the remote administrator and the step of identifying the smart card in the smart card database (col. 6, lines 33-41). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of DiGiorgio, Tolopka and Aboba to include a smart card database at the remote administrator and the step of identifying the smart card in a smart card database, as taught by Murphy, so that the authentication profiles can be indexed and maintained using well-known database techniques.

b. Regarding claims 18, 37 and 41, DiGiorgio, Tolopka and Aboba do not disclose that the remote administrator comprises a plurality of administrators. Murphy discloses that a remote administrator can comprise a plurality of administrators (col. 5, lines 39-49). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of DiGiorgio, Tolopka and Aboba such that the remote administrator comprises a plurality of administrator, as taught by Murphy, to have a flexible implementation of the remote administrator.

8. Claims 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over DiGiorgio in view of Tolopka and Aboba as applied to claim 12 above, and further in view of Muftic (5,943,423). DiGiorgio, Tolopka and Aboba do not disclose the step of performing an administration operation. Muftic discloses the step of performing an

administration operation by transmitting a certificate and credentials (col. 5, lines 33-38).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of DiGiorgio and Tolopka to include the step of performing an administration operation by transmitting a certificate and credentials, as taught by Muftic, in order for the remote administrator to be able to control access to the protected resources.

9. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over DiGiorgio in view of Tolopka and Aboba as applied to claim 12 above, and further in view of Pare, Jr. et al. (5,838,812). DiGiorgio, Tolopka and Aboba disclose that each operation performed during the accessing step by the smart card is performed only at the end of an administration procedure (col. 10, lines 47-50). DiGiorgio, Tolopka and Aboba do not teach the use of an "END ADMINISTRATION OPERATION" message at the end of a two-way authentication. Pare, Jr. teaches the use of message presented at the end of each operation, which has the same function as the "END ADMINISTRATION OPERATION" message (col. 6, lines 48-51). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of DiGiorgio and Tolopka to present a message at the end of an administration procedure, as taught by Pare, Jr., so that users can be informed of the result of the operation.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Dinh whose telephone number is 703-306-5617. The examiner can normally be reached on Mon - Fri: 9:00 am - 5:30 pm.

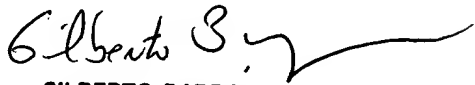
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 703-305-1830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MD

Minh Dinh
Examiner
Art Unit 2132

MD
6/4/04


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